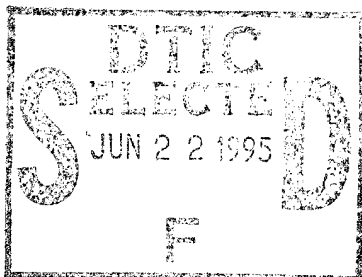


# STRATEGY RESEARCH PROJECT

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## JOINT READINESS EVALUATED

BY

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United States Army

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### JOINT READINESS EVALUATED

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## ABSTRACT

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Joint Readiness is a newly defined area of readiness. Its purpose is to assess the combatant commanders' capability to integrate and synchronize ready combat and support forces to execute their assigned mission. This study explores current joint readiness measurement concepts, functions, and levels of readiness. The functions which measure joint readiness are identified and discussed. It argues that several of the present joint readiness functions measure levels of readiness which are not joint. The paper proposes establishing a combatant commander strategic level of readiness and that several of the current joint readiness functions should be assessed at this new level of readiness.

Joint readiness is very difficult to assess because it does not lend itself to measurement in the same ways that we have traditionally measured service readiness. Readiness, as defined by the Joint Staff, is the ability of forces to deploy quickly and perform initially in wartime as intended when those forces were designed.<sup>1</sup> Readiness traditionally has been almost exclusively the responsibility of the uniformed military, with the services playing the dominant role. Service readiness focuses on the preparedness of units to execute assigned missions with available weapon systems or support systems. The current service readiness reporting systems are based on assessments of specific readiness resources which include personnel, training, equipment status, and supplies. Each of these resources is measured using both complex formulas and subjective judgement with the goal of estimating the capability of that unit to deploy and perform its wartime mission.

Joint publication 1-03.3, Joint Reporting Structure, and service regulations such as Army Regulation 220-1 have codified readiness reporting for the services within the Defense Department. These publications establish in great detail the elements of a system which is useful in assessing the readiness of a given force at the unit level.<sup>2</sup> Measurement of unit level readiness is an important piece of any process used to measure the capability of the armed services to perform a mission. However, unit level readiness is not sufficient by itself because it does not measure the capability of independent units to perform their mission collectively.

In an era of force projection from bases in the United States, peace support

and humanitarian relief operations, and support of UN initiatives, the armed services need to know more about prospective operational effectiveness than can be learned from current and proposed readiness measurement policies. Data on unit level readiness--the preparedness of individual squadrons, ships, and battalions--tells us little about the effectiveness of a force composed of many such building blocks. This paper argues that the capacity of a warfighting commander-in-chief (CINC) to use such forces effectively is measured by his ability to form joint task forces (JTF), to integrate and optimize the capabilities of the discrete components of that task force. In effect, the whole must be greater than the sum of its parts.

### **The Joint Readiness System Today**

The Joint Staff identifies a joint readiness system with three readiness levels, a warfighting spectrum within which each level is employed, and the responsibility for measuring, reporting and allocating resources within that level.

- o The unit level is at the tactical level and is the responsibility of the individual services.
- o The joint force level is at the operational level and the responsibility of the combatant commander.
- o The national level is at the strategic level and is the responsibility of the Secretary of Defense.

Even though the JCS identify three levels of readiness, joint force readiness, by the joint staff definition, measures only the first two levels.

Consequently, there appears to be a level of readiness not addressed in the

current joint readiness system. This level fits between the joint force level and the national strategic level. The combatant commanders are responsible for planning and executing much more than the operational level of war. They are also responsible for the strategic level, if they are theater commanders, or for broad geographic areas of responsibility if they are combatant commanders with global responsibilities, such as the Commander in Chief, United States Transportation Command. The Joint Staff currently includes specific strategic readiness issues identified by the combatant commanders in the functions that assess joint readiness.

Should the Joint Staff identify a strategic level of readiness applicable to combatant commanders? Such a decision would continue to measure important functions presently considered during each monthly readiness review while clarifying the focus of joint readiness. Creating a combatant commander strategic level of readiness and defining it as the level of preparedness of combatant commands to carry out the national military strategy within their theater or on a global basis could produce several benefits. First, it would allow the combatant commands to measure their ability at the operational level as well as at the strategic level. Second, defining this level of readiness would relieve combatant commands of the requirement to assess readiness issues that do not directly contribute to their ability to integrate or synchronize combat forces. Third, the decision to create a strategic level of readiness could bring about a more precise definition of JTF readiness and hence a more accurate assessment of resources required by the combatant commanders to meet and sustain a combat ready JTF headquarters.

In an effort to evaluate the readiness of joint forces, the Joint Staff recently developed a system to fill the void between measuring the ability of the components of a combatant command and that of a JTF to accomplish the assigned joint or combined mission. At the joint force level the new functions are:

- o joint task force (JTF) capability
- o intelligence, surveillance and reconnaissance
- o command, control, communications and computers (C4)
- o strategic mobility
- o logistics and sustainment
- o infrastructure
- o special operations.

During the Joint Monthly Readiness Review (JMRR) each of these resource areas is measured against each CINC's current and projected capability to conduct specific operations, such as those in the scenario that assumes two nearly simultaneous major regional contingencies.<sup>3</sup>

With the current definition of joint readiness used by the Joint Staff the difficulty is that several of the functions do not conform to the current definition of joint readiness. Functions that include aspects of the combatant commander's strategic readiness, enable, but do not directly contribute to, the determination of whether or not a joint force is ready to fight. A decision needs to be made whether some of these areas more properly belong at a level of readiness other than the joint level.

## **The Issues**

Measurement of the readiness of the larger force--or joint readiness--becomes the most important determinant of the ability of a joint force to perform its mission once deployed. This is in part due to the increasing dependency of the services as forces downsize and eliminate perceived redundancies. Most important is that U.S. armed forces will more often than not perform their mission jointly. Recent operations ranging from the Gulf war to deployment to Haiti bear this out. Our expectations of joint forces can be compared to recent events involving major disasters within the United States. Police forces, fire departments and other city or county emergency services are analogous to units within the services. The readiness of these individual organizations to perform the mission for which they were designed can be measured. When faced with an event which transcends their individual capabilities some measurement of their collective readiness is required. The emergency management organizations which pull them together at the city, county, state and national level are similar in function to joint task force headquarters and combatant command staffs.

Routine exercises that evaluate the capability of the emergency management organizations to integrate various emergency forces provides a way to determine the operational capabilities of the organizations working together as a team. Measuring the capability or preparedness of combatant command staffs and joint task force staffs to integrate forces in a similar way will help to develop an understanding of the operational readiness of the collective force. Emergency disaster drills seek to determine the capability of the diverse emergency management agencies to operate



effectively together, to understand one another's capabilities and limitations, to collect, analyze, disseminate and act upon data and information, and to integrate the collective to attain the agreed objective. These are the same elements we must be able to measure to ensure the readiness of a joint task force.

Measurement of readiness consists of a mix of those things which can be quantified, such as the number of people assigned to a given unit, and those things which require a subjective assessment, such as the state of individual and unit training. The Joint Staff identifies a joint readiness system in which readiness is defined as the readiness to fight and win as a joint force at the tactical and operational level. At the unit (tactical) level, units are organized, equipped, and trained to provide the war fighting capabilities required by the combatant commanders. At the joint force (operational) level, it is the combatant commander's capability to integrate and synchronize ready combat and support forces to execute their assigned mission that is the measure of readiness.<sup>4</sup>

### **Defining Joint Readiness**

In thinking of joint readiness it is important to clearly articulate what it is, and equally important, what it is not. Key to the definition of joint readiness is the words used to describe what combatant commands or JTFs are to do. According to each definition used by the joint staff it is the **capability or preparedness to integrate forces**(emphasis added) that is the standard against which to measure joint readiness. It is therefore important to review each resource and function to decide whether it applies exclusively to joint readiness or whether it more properly measures

another aspect of readiness. Evaluating each function against objective criteria that define the essential elements of a readiness reporting system, such as those identified by the Defense Science Board Task Force on Readiness, also helps to identify the level at which a function belongs.<sup>5</sup>

Using this method to identify readiness measurements that lend themselves to assessing joint readiness, the measurements that affect the capability or preparedness to integrate forces can be measured by examining the following functions:

- o JTF capability reflects compliance with the tasks, conditions and standards required to integrate units from all the services into a combat capable ad hoc organization
- o availability and suitability of the means to collect and disseminate intelligence, surveillance and reconnaissance information
- o availability and capability of command, control, communications and computers (C4) within the JTF headquarters and the subordinate units.<sup>6</sup>

Strategic mobility, logistics and sustainment, and infrastructure all indirectly contribute, but are more properly related to other parts of the JCS readiness structure. Special operations is a unique area that is measured at both the unit and joint levels of readiness.

### **Assessing the Combatant Command or Joint Task Force Staff**

The ability of the combatant command or JTF to integrate combat and support forces into an effective joint or combined operating force is the essential element in

measuring joint readiness. To measure joint readiness then, the combatant commander must measure the proficiency of the combatant command or JTF staff, and assess the tools at their disposal that enables the staff to integrate forces to perform an assigned mission.

Measurement of this element of readiness begins with the identification of requirements that identify joint mission essential tasks that the joint force must be capable of performing. This process began with the adoption of the current Universal Joint Task List, but the tasks it identifies are too generic to help the combatant commander. The tasks do not establish either the conditions or the standards that would allow commanders to measure readiness. These tasks are typically the result of analyzing the command's mission and planning documents. Once the most likely missions and tasks required in combat or operations other than war are identified, the conditions under which the tasks are performed and the standards against which the joint unit is measured have to be formulated. These objective conditions and standards then allow any unit likely to be assigned to the combatant command to assess proficiency on a particular task and focus training activities to meet standards in all tasks. A combined list of missions, tasks, conditions and standards will provide a foundation for developing a Joint Mission Essential Task List (JMETL) against which the command or JTF staff can be measured to determine its readiness to integrate forces.

The process of establishing CINC joint mission essential task lists begins with the development of precise tasks that cover the joint warfighting spectrum, from the

tactical to the strategic levels. This begins with a mission analysis of tasks identified in the Joint Strategic Capabilities Plan, to include implied tasks that are unique to the focus of that commander, be it regional or global. A mission analysis of each command's planning documents will identify additional tasks. Factors such as culture, history and geography must be considered at this point. Identification of essential tasks is also influenced by the requirement to work within a coalition and the requirement to meet associated foreign language requirements.

This process continues with the development of standards required to demonstrate proficiency for carrying out a given task and the establishment of the conditions under which those standards are measured.<sup>7</sup> Although mission essential task list development is new to the joint world, the Army has a variety of Mission Training Plans that cover functions ranging from staff planning, to communication, to providing fire support. Adaptation of these plans, developed and refined over many years, can significantly speed up the process of developing JMETLs.

JMETL development will allow the combatant commander to train the combatant command or JTF staff to integrate and synchronize combat and support forces. Exercises or simulations of a joint mission essential task list, with the associated conditions and standards, will provide the criteria against which to measure the capability of the command or JTF staff to integrate and coordinate the operations of what is, in the final analysis, an ad hoc organization. A joint mission essential task list for assessing the ability to integrate forces at the joint level can preclude situations in which U.S. forces are inadequately prepared to meet an

emergency.

### **The Integration of Intelligence, Surveillance and Reconnaissance**

Key to the capability to integrate combat and support forces is the capability of the combatant command or JTF staff to plan and direct, collect, process, produce and analyze, and disseminate intelligence, surveillance, and reconnaissance (ISR) data and information horizontally and vertically throughout the assigned force.

Evaluation of the intelligence, surveillance, and reconnaissance effort requires a unique approach. These activities, conducted at all points in the warfighting hierarchy, include gathering information ranging from the most broadly focused to the most narrow. Despite quality or quantity, this information is of little value if it is not available at the right place and at the right time. Raw or unprocessed intelligence, surveillance, and reconnaissance (ISR) information is typically of less value than that which has been synthesized and analyzed. Furthermore, this information still is of no value if it cannot be disseminated rapidly throughout the force. Therefore, to evaluate the readiness of this function it is important to decide whether the combatant command or JTF staff can successfully accomplish the tasks required to gather and disseminate the information to the force as a whole.

To achieve joint readiness the combatant command or JTF staff must have access to the right technical experts with the right equipment. Experts who come from the various services must possess the proper mix of skills to bring together the array of available ISR capabilities. For example, an operation which uses special operations forces requires personnel assigned to the JTF staff who understand the

capabilities and limitations of special operations forces and equipment to ensure that these assets are integrated effectively into JTF activities.

Collecting this information requires that the staff have the capability to access the necessary sources, (e.g., human, signal, photo), at all levels of the war fighting spectrum. It also requires in certain circumstances the authority and means to task directly the information-gathering source rather than relying on other agencies to collect and provide the information. This access demands a robust, secure, and comprehensive communications architecture capable of information flow both vertically and horizontally. An ISR capability fully integrated among all the service components of a JTF is a prerequisite for joint readiness within a combatant command.

### **Integrated Battlefield Command, Control, Communications and Computers**

The standard of rapid dissemination and timely receipt of information demands a robust, secure, and interoperable communications architecture over which the information will pass.<sup>8</sup> The need for measuring the effectiveness of an integrated battlefield command, control, communications, and computers (C4) architecture is well established. Vignettes from Grenada to Desert Storm--in the latter operation the Air Force's Air Tasking Order had to be printed and hand delivered to the Navy instead of electronically transferred--reflect potential inadequacies. Each of the services has independently developed a C4 architecture appropriate to the environment within which it operates. While systems adequately support the individual services, they frequently do not provide the interoperability necessary for

elements of the services to operate jointly. The standard in this function is the capability for each element of the joint force staff to receive, process, and transmit information in near real-time to all elements of the force, be they U.S. or allied.

The variety of service and allied C4 architectures suggests that the joint force staff should be charged with integrating all C4 functions. This concept requires both hardware and software at the joint force level which can operate in a variety of frequency spectrums and at a variety of processing rates while remaining capable of translating and transferring information rapidly. Meeting this challenge is the key element to developing an integrated battlefield C4 architecture suitable for successful joint operations.<sup>9</sup> The newly fielded Army Theater Missile Defense Tactical Operations Center provides an example of how to meet this objective. This command and control system possesses most of the requirements currently needed to accomplish the integration function at the joint force staff level. Thus, unsatisfactory joint readiness in the C4 area should not imply that the individual services are not prepared for joint operations. It only means that the capability of the force cannot be maximized as called for in joint doctrine.

#### **Areas That do not Measure Joint Readiness for a Combatant Commander**

The combatant commander's capability or preparedness to integrate and synchronize the operations of combat and support forces is the measure of joint readiness. Several areas currently identified as joint readiness measurement areas are less likely to measure the combatant commander's ability to integrate the operations of assigned forces. These are:

- o strategic mobility capabilities
- o logistics and sustainment activities
- o infrastructure in regions for which the combatant command is responsible.

These functions<sup>10</sup> seem to have been included by the Joint Staff because they enable joint readiness and are important to the ability of the force to operate effectively. The readiness of these activities may more accurately belong to a different concept of readiness. The reasons for excluding each of these functions from estimates of the joint readiness of a combatant command are listed below.

### **Strategic Mobility as an Element of Combatant Commander Strategic Readiness**

Strategic mobility includes strategic airlift and sealift assets. Strategic mobility assets are assigned to the United States Transportation Command(USTRANSCOM). This command has been chartered with the unique responsibility of providing strategic power projection capability in support of other combatant commands. When assessing the joint readiness of strategic mobility we should determine its effect on the integration of forces.

USTRANSCOM is charged with the readiness of strategic mobility assets. Only it can assess the readiness of strategic lift to meet the requirements of two MRCs or any other scenario. All other combatant commands depend on USTRANSCOM's ability to accurately predict the lift requirements of any scenario and to identify shortfalls based upon the apportionment of strategic lift assets to meet their needs. Strategic mobility readiness is essential to the success of the combatant commands but the status of strategic mobility does not directly contribute to the



capability of the joint force staff to integrate forces assigned to carry out the assigned mission. Strategic mobility should instead be addressed at the combatant commander strategic level, not only to maintain visibility on this important area, but to recognize that strategic mobility enables the readiness of the joint force. It contributes little to assessing the capacity of a JTF to integrate and synchronize the activities of its component parts.

### **Logistics and Sustainment**

Logistics and sustainment is generally a service function; readiness assessment of it is currently addressed by service readiness indicators. Nonetheless, often logistics are managed at the joint force level because of the need to husband scarce resources. Integration requires the JTF to use each disparate unit to achieve the full benefit of their combined capability. Managing scarce resources is not the same as integrating the capabilities of a force. Just as with strategic mobility, the issue which needs to be addressed is the effect that logistic and sustainment has on the capability to integrate forces to execute their assigned mission.

Aspects of logistics and sustainment, which enable the ability of the joint force to accomplish its mission, such as war reserve stocks and pre-positioned unit sets of equipment, must be managed differently than material reported as part of each service's readiness reporting system. Desert Shield and Desert Storm showed that when significant quantities of these assets are transferred between theaters, they constitute a forward positioned strategic asset. Strategic assets such as these can significantly improve the warfighting capability of the force, but they do not

necessarily affect the integration of that force. Because logistics and sustainment are force enablers, this function needs to be measured at a level which accurately reflects their contribution to the success of the operation. Logistics and sustainment, while visible at the combatant commander strategic level, generally do not affect that commander's ability to integrate the assets he receives to carry out his plan.

### **Infrastructure**

The state of the infrastructure in a given area of the world is extremely important to the capability of any combatant commander to deploy, receive, and sustain forces. Infrastructure in this context consists of airfields, seaports, road and rail networks, and a variety of other facilities, generally of a permanent nature. The effect of infrastructure on the integration of forces in a JTF may be less than previously assumed.

A well developed Infrastructure in the operational area will enhance integration of combat and support forces in a JTF. But U. S. forces must also possess the capability to integrate into a cohesive force, capable of decisive action, without an adequate infrastructure, as demonstrated recently in Somalia and Rwanda. When called to action, those forces must arrive ready to operate as a cohesive force, one capable of executing the assigned joint or combined mission. A robust infrastructure significantly simplifies the challenges associated with bringing together component forces, but infrastructure does not necessarily make the joint force staff task of integrating those forces easier. If the U.S. is to maintain its power projection capability, joint forces cannot be dependent on infrastructure to be operationally ready

when formed into a JTF. Infrastructure probably should be measured as part of the commander's strategic task rather than as an aspect of the capacity of the JTF to carry out its mission.

### **Special Operations-Uniquely Joint**

Special Operations poses unique challenges for a JTF commander. The services are responsible for manning, training and equipping (excepting truly unique items) special operations forces; the readiness of such forces is still reported through each service's readiness reporting system.<sup>11</sup> At the joint readiness level, the geographic combatant commanders presently report on the adequacy and feasibility of special operations forces identified to support specific plans.<sup>12</sup> Such an approach presents certain disadvantages however, in that it requires the combatant commander to focus on the readiness of forces over which he has no control.<sup>13</sup>

Special operations forces are integrated into the combatant commander's plans by the theater Special Operations Command (SOC) . To measure the joint readiness of special operations forces, the geographic combatant commander needs to measure the proficiency of the theater SOC. This can be done in the same way that the commander should measure the capacity of the joint force staff, for in many respects, the theater SOC is a microcosm of the larger combatant command. The development and use of a JMETL, the need for integrated intelligence, reconnaissance, and surveillance and the need for an integrated command, control, communications and computer architecture--all are important in assessing the theater SOC staff. By focusing on the integrative requirements of the theater SOC the

combatant commander might more accurately assess the joint readiness of special operations forces.

Concurrently, the Commander in Chief, Special Operations Command (CINCSOC) needs to report on readiness of those areas that cross the boundaries of the geographic combatant commanders. Because of the inherent flexibility of special operations forces, CINCSOC is in the best position to identify the unique requirements and readiness challenges of SOF which affect all combatant commands during each periodic readiness review by the Joint Staff.<sup>14</sup>

### **Conclusion**

The policies and procedures for measuring joint readiness should be examined carefully from the perspective of the combatant commander. Those indicators which reflect the capability of the joint force staff to integrate combat and support forces to execute the assigned mission should be retained at the joint readiness level. Those which do not measure the joint force staff's capability to integrate assigned or attached forces need to be evaluated regarding their contribution to theater readiness.

The readiness of a joint force should be measured against the ability of the joint task force to integrate assigned forces through the effectiveness of the JTF staff; the resources of theater intelligence, surveillance, and reconnaissance, and the capacity of command, control, communications, and computer assets. Each of these joint readiness functions should contribute to helping disparate units achieve the full effect of their combined capabilities. The combatant commander needs to assess the

proficiency of the command or joint task force staff and the means at their disposal that allow for the integration of forces to perform an assigned mission. The development of a Joint Mission Essential Task List with the associated conditions and standards will allow the combatant commander to train the combatant command or JTF staff to integrate and synchronize combat and support forces. A JMETL will provide the criteria against which to measure the capability of the command or JTF staff to integrate forces provided by the services. The capability of the command or JTF staff to plan and direct, collect, process, produce and analyze, and disseminate intelligence, surveillance and reconnaissance both horizontally and vertically throughout the force is equally essential. Equally important is an integrated battlefield C4 architecture which allows the joint force commander to achieve synergy within the force.

Those functions currently being measured which do not fit the definition of joint readiness include strategic mobility, logistics and sustainment, and infrastructure. These functions seem to be included in the present assessment because they enable joint readiness and are important to the ability of the force to operate effectively throughout an extended deployment. Nonetheless they may be more profitably assessed from a different readiness perspective. When analyzed against their contribution to joint readiness, each one of these functions seems to address readiness related to a combatant commander's strategic concerns. The Joint Staff might consider defining readiness levels to recognize that combatant commanders are responsible for a level of strategic readiness.

Special Operations as a measurement area of joint readiness remains unique. The combatant commander needs to assess the ability of the theater SOC to integrate special operations forces to perform an assigned mission. In many respects measuring the theater SOC is analogous to measuring the integrative capability of the joint force staff itself.

A reevaluation of joint readiness against the integrative requirement contained in the definition could produce significant benefits. It will allow a clear identification of joint readiness measures and effectiveness; it will provide a clear understanding of and the ability to focus resources on those areas that contribute most directly to joint readiness. It will also identify those activities and functions which identify the requirement for the addition of the combatant commander's strategic level of readiness.

## NOTES

Research for this article included extensive use of Electronic Mail. Mr. John Frye, U.S. Army Combined Arms Support Command, Colonel John J. Meyer, U.S. Special Operations Command, Colonel Albert Leister, U.S. European Command LNO, Colonel Ken Getty, Commander of the First Special Warfare Training Group (Airborne ) Special Warfare Center and School graciously lent their advice and support to this effort.

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2. Joint Chiefs of Staff, Joint Reporting Structure Status of Resources and Training System (SORTS), Joint Pub 1-03.3 (Washington: Joint Chiefs of Staff, 10 August 1993). Department of the Army, Unit Status Reporting, Army Regulation 220-1 (Washington: U.S. Department of the Army, 31 July 1993).
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4. Information on the Joint Readiness System provided by the Readiness Division of the Joint Staff J-3.
5. Defense Science Board, Report of the Defense Science Board Task Force on Readiness, June 1994, 6. The essential elements of readiness identified by the Defense Science Board include: Defined areas of readiness; C4I; clearly assigned responsibility and criteria for those areas of readiness; measures of readiness within each defined area; a reporting and verification system; and a system of review by the various levels of authority responsible for allocating resources to achieve readiness and decisions to employ ready forces.
6. Metrics currently used to identify elements measured in joint force readiness provided by the Readiness Division of the Joint Staff J-3. JTF capability metrics include staff officer proficiency in JTF operations, joint professional military education statistics, force and personnel availability, and joint and combined exercises. Intelligence, Surveillance, and Reconnaissance consists of areas such as sensor capacity, ground unit processing capacity, and tactical imagery collection and dissemination. C4 metrics include military satellite communication capacity, JTF communications capacity, joint communications interoperability, and deployable command center capacity.
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8. Jeffrey T. Richelson, The U.S. Intelligence Community, Second Edition (New York: Harper Business, 1989), 3-4.

9. Joint Chiefs of Staff, The C4I for the Warrior Concept, (Washington: Joint Chiefs of Staff, 12 June 1994). The recognition of this need is expressed in the C4I for the Warrior initiative. C4I for the Warrior consists of three phases: the quick fix phase (victory declared in 1993), the midterm phase and the objective phase. The quick fix phase included promulgation of the C4I for the Warrior paradigm, policy and doctrine implementers and interoperability design and engineering projects that would result in near-term, high leverage interoperability improvements. The midterm phase is intended to demonstrate the initial operational capabilities of the global command and control system (GCCS). The GCCS core consists of the basic functions required by the war fighter to plan, execute, and manage military operations. The objective phase uses continually advancing technologies and experience to achieve optimized C4I support for the warrior.

10. Metrics currently used to identify elements measured in joint force readiness provided by the Readiness Division of the Joint Staff J-3. The Joint Staff identifies the elements of strategic mobility as strategic airlift, strategic sealift and intratheater mobility. Logistics and sustainment consists of prepositioning afloat and ashore, sustainment stocks, health service support, support forces and preferred munitions. Infrastructure metrics include road networks, airfields, seaports, railroads, water and petroleum distribution, bed down for personnel and equipment and power generation and distribution.

11. The Commander-in-Chief, United States Special Operations Command is also required to report the readiness of special operations forces.

12. Information on the readiness reporting of special operations provided by the Readiness Division of the Joint Staff J-3.

13. Metrics currently used to identify elements measured in joint force readiness provided by the Readiness Division of the Joint Staff J-3. Special operations metrics include psychological operations and civil affairs capacity, SOF intelligence capacity, SOF sustainment capacity, and SOF mobility capacity.

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